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MOUNTAIN PASSES: A STUDY IN ANTHROPO-
GEOGRAPHY.*

BY

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We now come to the pass city, which is situated in the plains or lowlands at the foot of a pass, and which draws its support both from mountains and plains. It is located on the line of travel which always skirts the base of a mountain range, at the point where this is intersected by a transverse route of communication across the highlands. The greater fertility of the plains makes for a larger centre of population, the intersection of trade routes ensures commercial activity; hence such points offer conditions for large and flourishing cities, especially if railroads follow the two lines indicated. Such is the location of Narbonne and Barcelona at the extremities of the route over the eastern Pyrenees; Toulouse commanding the central passes, and Bayonne the western. The St. Gothard route is flanked by Lucerne on the north and Milan on the south, just as the Brenner is by Munich and Verona. Tiflis is situated in the great valley highway between the Caspian and Black Seas, but through the Pass of Dariel (7,954 ft.) to the north come the influences that make it a Russian town. Peshawar depends more upon the Khaibar Pass and its connections thereby with central Asia than upon the Indus river. Kabul, which commands the western entrance to this route, and lies on the great thoroughfare through the Pass of Bamian to Russian Turkistan, is one of the keys of India; while Kandahar, the other, occupies the point where all the routes of western and southern Afghanistan converge for the descent through the Bolan pass to the Sind. But great as is the

* Continued from BULLETIN No. 2, 1901, p. 137.

commercial and strategic importance of these cities, it sinks into insignificance in comparison with that of Herat, which commands the Heri-Rud depression leading down to Turkistan. In the twelfth century, according to a Persian historian, it had 444,000 houses and 12,000 shops. It has been attacked and destroyed fifty times, each time rising from its ruins. The Russians plan eventually to make it the terminus of the Trans-Caspian Railroad.

Where mountains follow a semi-circular course, the routes over their passes must tend to converge on the inner side. Such foci of highways are the fore-ordained sites of great commercial centres. The bazaars of Merv are fed by all the mountain routes from Meshed in Persia to Kabul in eastern Afghanistan. Khulm and Balkh draw on all the twenty or more passes over the Hindu-Kush and the Pamir, Bukhara is the focus of all the southern routes on which, in relation to itself, Merv and Khulm are only intermediary points; while with Samarkand and Tashkent it shares a position before the great valleys of the western Tian-shan. Its location would make it one of the great cities of the world were it not for the encircling desert and the scantiness of its water supply, which is tapped further up stream for the irrigation of Samarkand. In its bazaars are found drugs, dyes, and teas from India; woven goods, arms, and books from Persia; arms and fine horses from Merv; wool, skins, and dried fruit from Afghanistan, and Russian merchandise from Moscow, Nijni-Novgorod, and Orenburg. English goods, which formerly came in by the Kabul route, have been excluded since Russia established a protectorate over the province of Bukhara. Just across the highlands of central Asia, to the east, the cities of Kashgar and Yarkand occupy the centre of the vast amphitheatre formed by the Tian-shan, the Alai-tag, the Pamir, Hindu-Kush, and the Kuen-lun. Stieler's atlas marks no less than six trade-routes over the passes of these mountains from Kashgar to the head streams of the Oxus and Sir-daria, and six from Yarkand to the Oxus and the Indus. Their position is paralleled by that of Turin, which occupies the focus of all the roads over the central, western, and Ligurian Alps, commanding thus a fine sweep from Lucerne in the north around to Savona in the south.

The location of Turin is superior to that of the central Asiatic cities mentioned above, because the passes which it commands unite the two great natural waterways found in the Rhone and the Po. The accessibility, the sphere of attraction, and hence the value of all mountain passes, is determined in large part by their connection with the natural highways which are found in river

basins. The passes of the central Asiatic highlands lose much of their importance by a lack of waterways. Of the streams draining this vast upheaved area the Oxus, Sir-daria, Chu, and Ili are lost in land-locked seas or lakes; the Tarim is soaked up by the sands of the desert, and only the Indus, which merely skirts the base of this highland on its most inaccessible side, reaches the ocean. In contrast, the Alps are flanked by the Po, the Rhone, and the Danube. The passes of the Pyrenees open on one side into the valley of the Ebro, and on the other to the Garonne, with its canal extension to the Mediterranean. The Pass of Belfort is the greatest historic highway of Europe, because it unites the deep furrows of the Rhine and the Rhone. The passes of the Alleghanies, in western Pennsylvania, lead through their pass valleys to the Ohio at its head of navigation. The Mohawk depression connects the Hudson with the inland waterway of the Great Lakes, and hence, in its historical and commercial importance, is one of the most significant natural features on the North American continent. Even the far-away Yukon serves as a highway from the northern outlets of Chilkoot and White Horse Pass to the goldfields of Dawson City and Forty Mile Creek.

As the world's roads are used primarily for commerce, pass routes rank in importance according to the amount of trade they forward, and this in turn is decided by the contrast in the lands which they unite. The passes of the Alps and the Pass of Belfort are busy thoroughfares, because they effect the exchange of the products of the tropical Mediterranean and of the temperate regions of central Europe. Or, the contrast may be one of occupation. The Mohawk depression forwards the grain of the agricultural Northwest in return for the manufactured products of the Atlantic cities. The passes of the Asiatic highlands connect the industrial lowlands of India and China with the nomad uplands of Mongolia, Afghanistan, eastern Bukhara, and Russian Turkistan. Hence they facilitate the exchange of the wool, skins, camel's hair cloth, and metal work of the wandering pastors for the manufactured goods and fine agricultural products of the sedentary populations in the fertile lowlands. Where passes offer an outlet for inland countries to the sea, their sphere of attraction, and therewith their importance, is immensely increased. San Francisco, New York, Philadelphia, Marseilles, Venice, Trieste, and Karachi are seaports which owe their importance in no small degree to the great passes back of them.

Though mountain passes are pre-eminently thoroughfares for

trade, and though the purposes of trade have lent their settlements a certain common physiognomy, nevertheless war, too, has had a hand in modifying the work of nature there in making military roads and building forts, and in giving to the history of mountain passes the element of adventure to vary the monotonous tale of trade. The final ascent to the summit of high passes is oftentimes made through wild, narrow ravines, which present the greatest difficulties to the advance of an army, and predetermine the point of bitterest aggression and defense in time of war. Such is the gorge of Valsorey leading up to St. Bernard, where Napoleon encountered the greatest difficulties in his famous passage of the Alps in May, 1800, with 30,000 men; such the gorge of Cardinel, just below the Splügen Pass, where the French army, under General Macdonald, ascending this ravine in December, 1800, was struck by an avalanche, and lost a large number of its men, who were hurled into the abyss below. When Suvaroff, in September, 1799, crossed the Alps to drive the French out of Switzerland, he came up the Ticino to the dangerous Val Tremola (6,375 ft.), where he had several sharp skirmishes with the enemy, crossed the St. Gothard, forced the passage of the Urner Loch, but had a fierce fight at the Devil's Bridge, at the lower end of the gorge, and compelled the French to retreat to Lake Lucerne. Just six weeks before the Devil's Bridge had been the scene of a battle between the Austrians and French.

The same military exploits have been enacted over and over in mountain passes. The gaps in the Hindu-Kush and the Sulaiman ranges have been traversed by the conquering forces of the early Aryans, Alexander and his Greeks, Mongols, Tartars, Persians, and English; and now the Russians are ready to descend by the same routes to the Indus. Every foot of the Khaibar Pass has been fought over repeatedly, and the Ali Musjid fort, which guards it now, has been alternately held by Afghans and English. In the pass of Roncesvalles, leading across the western Pyrenees from Pamplona to St. Etienne, fell the army of Charlemagne in 778 with the flower of his knighthood; through this valley the Black Prince in 1367 led his troops to the victory of Navarrete; up this valley in 1813 moved a division of Wellington's army, driving the French before them; and by this route Soult advanced across the frontier from France for the relief of the French forces shut up in Pamplona. In the eastern Pyrenees, the Col de la Perche saw the legions of Hannibal, of Pompey, of Cæsar climbing the mountain barrier, and the repeated advance and withdrawal of French forces in the Peninsular War.

Military needs have given a certain common physiognomy to mountain passes. Artificial defences of every kind guard the approaches to the summit. Forts, castles, watch-towers, mount the heights of almost every gap in the southern Eurasian highlands from the Bay of Biscay to the Bay of Bengal. A more archaic form of defence is found in the ruins of walls built across these natural portals. The old Caucasian wall was built across the Albanian Gates in the eastern Caucasus by the Persians as a barrier to barbarian invasion from the north, and was provided with iron gates by Harun al Rashid. Strabo says that in his day the *Pylæ Caucasiz*, or Pass of Dariel, was closed by walls and gates. The Shah el Nadir, leading from the mountains of northern Persia to the plains of Turkistan, shows formidable walls to-day. The Afghans, in their recent war with England, threw temporary barriers across the Khaibar Pass to block the advance of the English. Compare Cæsar's wall and trench, nineteen miles long, which he constructed across the depression between Mt. Jura and Lake Lemman to stop the advance of the Helvetians. At the entrance to passes we find strongly fortified and garrisoned points as a base of supplies for aggression or defence in time of war. Such are Belfort, Stirling (which is the key to the Scotch Highlands); Vladikavkaz, at the entrance to the Pass of Dariel; Saverne (the Roman *Tres Tabernæ*), which defends the chief pass of the Vosges; Bayonne and Perpignan, both their fortresses the work of Vauban, which guard the eastern and western passes of the Pyrenees. Quetta, which is the chief British stronghold in the Sulaiman Mountains, is at the western outlet of the Bolan Pass, leading up from the Indus Valley; it also commands a route running west by the Kojah Pass to Kandahar, and another running north to Kabul. Some old towers standing in the vicinity of Quetta and at the entrance to the gorges attest the importance attached in all ages to this strategic position. Farther north Peshawar is the base of all military operations over the neighboring Khaibar and Paiwar Passes into Afghanistan, and northwest by the Chitral route to the passes of the Pamir.

Defensive war goes to meet the invading enemy at the frontier, and if this frontier is mountainous, the passes see the first engagements. Such was the battle of Thermopylæ. The low passes forming the outer gateways into the mountains of Switzerland have been the field of battles, small in point of the numbers engaged, but great in their significance. At Morgarten Pass, east of Lake Zug, in 1315, fourteen hundred Swiss Confederates won their first battle over their Hapsburg oppressors; and again in the same place

in 1798 the army of the Swiss Republic defeated the invading French. This spot has rightly been called the Thermopylæ of the Swiss. The battles between the Swiss and Austrians in 1386 at Sempach, which commanded an approach to Lucerne, and in 1499 at Frastanz, just south of Lake Constance, in defense of the entrance to the Upper Rhine, were of this same character. It was in the Pass of Killiecrankie that the Highland clans, supporting the deposed James II. of England, made their stand in 1689 against the army of William I. Stirling Castle, Falkirk, and Bannockburn—names great in the history of English invasion and Scotch defence—guarded the pass from the Lowlands to the Highlands.

Where the invading force succeeds in crossing the mountain barrier, it advances out of the mouth of the passes and in the plains meets the full force of the defending army—not a mere outpost, such as is often sufficient to hold a pass. Such plains, generally river valleys, from the topography of the country, become the great battle-fields of the world. It is safe to say that no other equal area on the earth has seen so many pitched battles as the valley of the Po. On its affluents, the Ticinus and the Trebia, Hannibal defeated the Roman consuls. Just west of the Ticinus at Vercellæ, Marius defeated the invading Cimbri. Five hundred years later Stilicho defeated the Goths under Alaric, who had invaded Italy by the Julian Alps, at Verona and Pollentia, two widely separated places, of which the latter commanded the entrance of the low pass south over the Ligurian Alps, now followed by the Ceva-Albenga road. In the Middle Ages, when the German Empire was trying to retain its hold on the Kingdom of Italy, the Po valley was the scene of conflicts. But this region saw its greatest conflicts when Napoleon, in May, 1800, brought his army across the Alps by the St. Bernard, the Simplon, St. Gothard, and other passes descended upon the enemy like a thunderbolt, and defeated them at Montebello and Marengo. The next few decades saw the battles of Novara, Magenta, and Solferino stain the streams of the Po. In the annals of Spain the valley of the Ebro affords a parallel to the Po in Italy. Any one who reads Napier's History of the Peninsular War sees that the activities in that great conflict were completely dominated by the passes of the Pyrenees. The first move on the part of the French was to seize all the Spanish piedmont, or mountain fortresses, like San Sebastian, Vitoria, Pamplona, Jaca, Figueras, and Barcelona, while the defences of Gerona were hammered at again and again to reduce that important point. Their communication with France secured by the possession of the passes,

the French moved forward to the Ebro, and then, in the eight years that followed, every foot of the Ebro from its source to the mouth was contested. When in the last period of the war the French began to give way, they made their last line of defence along the Ebro, whose waters ran blood once more. On their retreat over the passes across the frontier, the rivers of France—the Bidassoa, the upper Adour, and Garonne—repeated the history of the Ebro. Wellington's wonderful crossing of the tidal stream Bidassoa, the fall of the French cities Bayonne, Orthez, Tarbes, and Toulouse, placed the last eventful scenes of the war along these river valleys.

All mountain regions, like Afghanistan, the Caucasus, the Alps, and the Pyrenees, along whose base or over whose passes the great human tides of migration, trade, and war have poured, contain a motley assemblage of races, languages, dialects, customs and institutions in apparently hopeless confusion, in which, however, the anthropogeographer is able to detect an orderly arrangement. Especially is this true in the passes which have played a great part in ethnic and linguistic distribution. The fair and red-haired Teutonic type of Switzerland, limited in general by the crest of the Bernese Oberland and the Todi chain, extends south of this line in a broad but shallow wedge to the summit of the St. Gothard and Furka passes, while just beyond begins the dark Italian type and Italian speech. The Brenner, too, carries the German speech and greater height of the Teutons well over into the Adige valley as far as Bozen, where the stunted type of Mediterranean people and Italian speech begin. The lowlands on either side of the Alps are inhabited by two distinct long-headed races, the summits and remote upland valleys by the broad-headed Alpine race; the people of the pass show a cranial index intermediate between the two, indicating the intermixture of races which has taken place along this thoroughfare. The inhabitants of the Brenner are pretty much alike from Innsbruck to Bozen in cranial index, stature, coloring, and language; but remote side valleys show the unmixed Alpine race with every variety of dialect, custom, and social institution.

The passes of other mountain ranges have the same ethnic story to tell. The Pass of Belfort connects the tall, blond Germans of the Rhine with a long, narrow area of this same type, extending through this depression and down the Rhine to Marseilles and dividing two wider sections of the short, dark Alpine race. It has also exerted a marked influence on the natural history of Europe; it was the only route by which the southern flora and fauna could reach the north, since they could not cross the Alps. The two

extremities of the Pyrenees, where, as we have seen, are the best passes, show the same race of inhabitants on both the slopes. The province of Roussillon, in southern France, which commands the eastern routes to Spain, was annexed to France only in 1659. Its capital, Perpignan, in plan and architecture, is semi-moresque; and the inhabitants, in physiognomy, language, and dress resemble the neighboring Catalonians in Spain. At the other end of the Pyrenees, the Basques, whose predominantly long-headed type seems to point to their origin in Spain, occupy both slopes of the mountains; but the broad-headed Alpine race; native to southwestern France, has sent a deep wedge of its broad-headed type up the valley of the Nive and over the Pass of Roncesvalles as far as Pamplona, displacing the cranial index of the Basques, but adopting their language. In the Caucasus, the Ossetes, who hold the Pass of Dariel, are the only tribe occupying both slopes. The pass city Tiflis, at the crossroads of the two great routes between Europe and Asia, has been called the "precipitate of history." Prof. Brusch reckons seventy different languages spoken there. The great pass cities of central Asia, like Bukhara, Merv, and Tashkent, show the same feature of mixed population, embracing representatives from every country of Asia and from many of Europe, including always the ubiquitous Jew.

Those points on the earth's surface which attract the chief activities of man—travel, territorial expansion, migration, war, and commerce—must early assume political importance. Tribes inhabiting mountain passes have always been able to exert a political influence out of proportion to their size and strength; and they have also been the object of conquest by the people of the lowland. Entrenched in their mountain fastnesses, however, they have always been able to give the invaders plenty to do before the conquest has been accomplished. An old Persian proverb says: "If the Shah is too mighty, let him only make war on the Caucasus." Such mountain tribes have always exploited the advantages of their position by levying tolls. Cæsar describes a certain expedition he sent out under the command of his lieutenant to reduce three mountain tribes whose territories extended from Lake Geneva and the Upper and Middle Rhone to the summits of the Alps, and who controlled the passes traversed by the Roman merchants, *magnis portoriis et magno cum periculo*. The southern slopes of these mountains were occupied anciently by the Salassi, a Celtic tribe, who inhabited the valley of the Upper Dora Baltea and Buttier, and hence commanded the passage of the Great and Little St. Bernard,

the two most important routes from Italy to Gaul. They frequently harassed the Romans, and on one occasion plundered the coffers of Cæsar himself. After a protracted struggle this tribe was exterminated by Augustus, who founded Aosta to protect the high-roads and garrisoned it with 3,000 soldiers of the Prætorian cohorts. The Afghan tribes in the passes of the Sulaiman Mountains have been accustomed to impose high transit taxes upon traders traversing those routes between western Afghanistan and India. The travellers, therefore, organize themselves into bands of hundreds, or even thousands, as protection against attack or exorbitant exactions. The Afridis have always enforced their right to impose tolls in the Khaibar and Kohat passes. Since 1880 the English have paid them a yearly sum to keep these roads open.

Mountain regions, because of their passes, are great natural transition lands, and as such have always been the object of acquisition by neighbouring powers having designs on the country beyond. They have, therefore, assumed a peculiar political character, and have been the subject of a distinct political policy, which is only to-day recognized in its full significance—since the development of the national-empire idea and its consequent territorial expansion. This policy dictates the acquisition, not, as heretofore, of a mere border range as a frontier, but of a whole mountain region. In the military operations against the chief objective in the country beyond, the rugged highlands, with their passes, form the line of communication with the rear. It is of vital importance that this line, necessarily long, difficult, and easily obstructed at its passes, should be put beyond the chance of interruption. The whole mountain country, therefore, must be conquered. The conquest, though long drawn out, because of the independent spirit and intrenched position of the upland tribes, is a foregone conclusion. The sparsity of the highland population, their tendency, geographically determined, to form small, isolated valley States, and their lack of cohesion, make their eventual defeat certain. The small States of the Pamir, Roshan, Machan, and Shugnan have lost their independence to Russia; Afghanistan, the Chitral, and Kashmir to England. Only where the sense of danger, combined with an advanced civilization, overcomes the tendency towards disunion, as is the case of the Swiss, do we find a mountain people successfully maintaining an independent State. The Alps succumbed to ancient Rome, the Tyrol to the early German Empire. Napoleon I. conquered Switzerland, and began constructing military roads over the chief passes to Italy. By the second Afghan War, the Amir became

a feudatory of the British Crown, which gained control of the foreign relations of Afghanistan, and also of its great pass routes—the Khaibar, Kohat, Kuram, and the Bolan—to Kandahar.

In all of the cases cited, military or political exigencies pointed out the necessity of securing these transition lands; but, in the history of our own country, we have an instance of the occupation of such mountain districts purely as the result of the long-sighted prevision of America's first expansionist. The man was Gov. Spotswood, of Virginia. In his time the tide-water marked the limit of English settlement. Between that and the foot of the Blue Ridge lay a fifty-mile zone of unbroken forest. The beyond was unknown. All the Mississippi valley was claimed by the French, who, in order to hold it, were pushing the construction of a line of forts, reaching from New Orleans up to Detroit and Fort Duquesne. Rumors of these activities reached Gov. Spotswood, and his mind was disturbed by the cordon the French were drawing around the English settlement. So in 1716, by way of example, apparently, he made his famous expedition across the Blue Ridge by Swift Run Gap, from the headwaters of the Rapidan into the Shenandoah Valley, of which he took formal possession in the name of the King. In his letters to the Lords of Trade regarding this expedition, he explains the power of the French settlements of the interior to monopolize the fur trade and also to threaten the English plantations in the rear. And then he adds:

Nature, 'tis true, has formed a Barrier for us by that long Chain of Mountains w^{ch} run from the back of South Carolina as far as New York, and w^{ch} are only passable in some few places, but even that Natural Defence may prove rather destructive to us, if they are not possessed by us before they are known by them.

Then he recommends that, while it is yet possible, the English should make some settlements on the Great Lakes, and at the same time possess themselves of those passes of the mountains which should be necessary to preserve communication with such settlements.

The passes to and through such highlands are always the great objective. When a mountain State has effectively maintained its independence—as Switzerland has—and is conscious that its political importance is due to the roads it controls, it aims at the complete command of the entrances to its passes. Switzerland has succeeded in shutting Italy out from all her southern passes except the Great St. Bernard and the Splügen. The exclusive command of the St. Gothard route from lowland to lowland is secured by the wedge of Swiss territory which is driven down into Italy almost to

the plains of the Po. The same politico-geographical phenomenon is repeated just farther east in the southern approaches of the Brenner, again at the cost of Italy. But politico-geographical history in Europe has become old and staid, whereas in Asia it is only in process of making. In Asia, therefore, the evolution of the peculiar political character of these barrier areas is proceeding rapidly before our eyes. In this process Russia is the great factor, as a glance at the Russian frontier will show. To the political geographer the map of the Russian frontier in Asia is eloquent. Its distinguishing features are four great bulges, not so very pronounced when viewed in relation to the whole vast stretch of the Russian Empire; but when seen in detail and in relation to the topography, their significance becomes important. All four of these bulges have to do with mountain areas, and the accession of the territory has immediately been followed by the construction of a railroad—a fact which attests the importance which Russia herself attaches to the acquisition.

The only points at which the Russian territory extends south of the critical fortieth parallel are in Trans-Caucasus, Trans-Caspia, and the Pamir—all of them acquisitions of the past twenty-three years. The conquest of the Caucasus is geographically a conquest from Asia. Begun a hundred years ago, the frontier has been protruded, with slight interruption, southward over the Great Caucasus, the Anti-Caucasus, the Kazil-dagh (mean altitude 10,460 ft.), and to the still higher range forming the watershed between the Araxes and the Murad, the head-stream of the Euphrates. That name contains the climax of Muscovite expansion here. Along the Araxes basin three Powers converge—Persia, Turkey, and Russia; but Russia holds the lion's share, together with the best strategic points for descent on the Euphrates. Her outpost city is Kars, recently connected by railroad with Tiflis and with the port of Batum, on the Black Sea. Russia's objective is a port on the Persian Gulf, the commercial advantage of which would be enormous; on the political side, it would enable her to threaten the London-Calcutta highway in the flank. She is stamping upon the Armenian plateaux, therefore, the character of a political passway to the Euphrates, by which she hopes some day to reach the sea. If thwarted in this endeavor, she will utilize Afghanistan or Persia, and to this end is incidentally trying to gain ascendancy in the councils of the Shah.

This brings us to the second bulge in Russia's frontier. The first stretch of the Trans-Caspian railroad was built, after the con-

quest of this region in 1881, along the foot of the Hasar Meshid mountains, which form the northern border of Persia; and Askabad, because of its proximity to the Persian frontier and the carriage-road thence one hundred and seventy miles over the mountains to Meshed, was made the military headquarters of Turkistan, and provided with a strong garrison and abundant stores of every kind on a war footing. Meshed is connected by a road two hundred miles long with Herat, and is the chief city of Khorassan Province, over which Russia seems to have established an indefinite but convenient protectorate. Khorassan may prove a possible passway to the Persian Gulf; but if that fails the Russians have still the Gates of Herat. The Afghan-Russian frontier line, accepted by Russia in 1872, had its termini at Sarakhs at the north-east corner of Persia, on the Heri-Rud, and at Khoja Saleh, on the Oxus, directly east of Merv. In political documents and speeches this was assumed as the boundary till 1882, when the Paropamisus gap was discovered by a Russian explorer. In March, 1884, Merv was conquered, and then began the advance on the Gates of Herat along two lines—one from Sarakhs up the Heri-Rud, ending in the occupation of the Zulfikar Pass, the Robot Pass, and other avenues to Herat; the other from Merv up the Murghab river, which irrigates the Merv oasis, to the town of Penjdeh, which commands the approach to a much-used trade route over the eastern Paropamisus, here 8,000 ft. high, by the Pass of Hasret-i-Baba (6,400 ft.), straight to Herat. The English frontier survey commission, appointed finally to investigate the Russo-Afghan boundary, left the Muscovites in possession of the hundred and twenty miles of country they had occupied. To-day, south from Merv runs the famous Murghab branch of the Trans-Caspian Railroad for a hundred and ninety miles along the Murghab river to Kushkinski Post, on the frontier of Afghanistan, only about thirty miles from the fortress of Kushk, which guards the northern outlet of the Hasret-i-Baba Pass, and eighty miles from Herat. This is a purely strategical and military line, and is kept absolutely secret. No permission to travel on it has ever been granted to a foreigner. It is not difficult to foretell the history that will be made some day in the passes of the Paropamisus.

The next bulge in the Russian boundary is formed by the rectangle of the Pamir, which seems to have been attached by one of its corners, thus forming a very erratic frontier. The Pamir is approached by the Oxus, which Russia controls, and which by its two head-streams exactly embraces the plateau. By this acquisition,

therefore, Russia holds a strategic position for descent through its passes to northern India, or to the Tarim basin of Chinese Turkistan, with its cities of Kashgar and Yarkand. On the northern border, Russia's position is still more significant. An eastern branch of the Trans-Caspian Railroad to Margljan (2,000 ft.), in Fergana, brings Russia very near to the Tarim, for by the Terek Pass her forces can drop down from the wall of the Tian-shan into the valley of Kashgaria.

The next bulge is much more important, though much more slight; but the evidence seems to indicate that the eastward protrusion of the frontier towards the passes of the Dzungaria is only begun. It is evidently aimed at Kulja, where converge all the routes from the west to join the great imperial road of China. Now Russia demands the protectorate over Mongolia and Chinese Turkistan, for which she has been preparing her routes of communication. The main line of the Trans-Caspian Railroad runs at present only to Tashkent; but its extension to Kulja will undoubtedly be a thing of the near future.

The advance of the Russian frontier towards Afghanistan immediately succeeded a similar movement of the British in India towards strategic points to the west. India's western frontier shows a decided bulge into Afghan territory, with its apex pointed towards Kandahar, whose strategic value we have seen. Here, too, as in the case of Russia, the railroad has followed on the heels of the advance. The wedge driven westward and northward up the valley of the Chitral to the base of the Hindu-Kush in 1895 was a counter-movement, called for by Russia's occupation of the Pamir. Newspaper generals and parliamentary speakers of the time declared the Chitral a strategical position of doubtful importance, and set forth at length the impossibility of any attack from the north. But the Indian officers on the ground concluded that if Russia found it worth while to be on the Pamir side of the Hindu-Kush passes, it was at least expedient for England to be stationed at the southern entrances to the same. Thus even the "Roof of the World" has gained a political importance strangely at variance with its scantiness of resources and sparsity of population.